Safety Attribute Inspection (SAI) Data Collection Tool
1.3.5 MEL / CDL / Deferred Maintenance (AW)
Revision#: 5 Revision Date: 09/30/2013

ELEMENT SUMMARY INFORMATION

Scope of Element:

Purpose (operator's responsibility): To develop and maintain a comprehensive program for managing the repair of items listed in the approved Minimum Equipment List (MEL) / Configuration Deviation List (CDL) and Deferred Maintenance process.

Objective (FAA oversight responsibility): To determine if the operator's Minimum Equipment List (MEL) / Configuration Deviation List (CDL) and Deferred Maintenance process:

- Meets all applicable requirements of Title 14 of the Code of Federal Regulations (14 CFR) and FAA policies,
- Incorporates the safety attributes, and
- Identifies any shortfalls in the operator's MEL/CDL/Deferred Maintenance process.

Specific Instructions:

For planning purposes consider scheduling data collection for this airworthiness element and the associated operations element (3.2.3 MEL / CDL Procedures) concurrently for a complete evaluation.

SUPPLEMENTAL INFORMATION

Regulatory Requirements:

  D.095, Minimum Equipment List (MEL) Authorization
  91.213, Inoperative instruments and equipment
  119.5, Certifications, authorizations, and prohibitions.
  119.43, Certificate holder's duty to maintain operations specifications.
  121.135, Manual contents
  121.153, Aircraft requirements: General.
  121.303, Airplane instruments and equipment.
  121.367, Maintenance, preventive maintenance, and alterations programs.
  121.369, Manual requirements.
  121.373, Continuing analysis and surveillance.
  121.628, Inoperable instruments and equipment.
  121.701, Maintenance log: Aircraft.
  121.709, Airworthiness release or aircraft log entry.

Related CFRs & FAA Policy/Guidance:

Related CFRs:

Intentionally left blank

FAA Policy/Guidance:

FAA Order 8900.1, Volume 4, Chapter 4, Section 1
FAA Order 8900.1, Volume 4, Chapter 4, Section 7
FAA Order 8900.1, Volume 4, Chapter 4, Section 8
FAA Order 8900.1, Volume 4, Chapter 4, Section 10
FAA Order 8900.1, Volume 4, Chapter 4, Section 11

SAI SECTION 1 - PROCEDURES ATTRIBUTE

Objective:

The questions in this section of the SAI will help verify that the operator's documented procedures identify who, what, when, where, and how those procedures are accomplished. These procedures must allow all personnel to perform their duties and responsibilities with a high degree of safety.

14 CFR part 121.135(a)(1)

Tasks	
	The inspector shall accomplish the following tasks:
1	Review the information in the Supplemental Information Section of this SAI.
2	Review the duties and responsibilities for management and other personnel who accomplish the processes associated with this element.
3	Review the documentation of the processes associated with this element.
4	Review documented interfaces to identify interactions between related processes, interactions within this element process, and between one person, workgroup, or organization to another that the operator uses to accomplish this process.

Questions		
1.1	Do procedures specify that no one will operate an airplane with inoperable instruments or equipment unless the pilot has: • A record identifying the inoperable instruments or equipment allowed by the Minimum Equipment List (MEL), and • The MEL information necessary to operate the airplane with instruments and equipment inoperable? **Note(s):** *Procedures must require that aircraft are operated under all the applicable conditions in the MEL authorized for use by operations specifications. Procedures must require that instruments and equipment required to be operable by an airworthiness directive, or required for specific operations by 14 CFR part 121, are not included in the MEL.* Updated: Rev # 2 on 03/03/2010 SRRs: 91.213(c); 119.5(f)(1); 121.153(a)(2); 121.303(d)(1); 121.303(d)(2); 121.628(a)(1); 121.628(a)(2); 121.628(a)(3)(i); 121.628(a)(3)(ii); 121.628(a)(4); 121.628(a)(5); 121.628(b)(1); 121.628(b)(2); 121.628(b)(3) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
1.2	Do procedures specify that no one will operate an airplane with missing parts unless that pilot has: • A record identifying the missing part allowed by the Configuration Deviation List (CDL), and • The CDL and flight manual information necessary to operate the aircraft	☐ Yes ☐ No, Explain ☐ Not Applicable

	with the missing part? **Note(s):** *Procedures must require and ensure that aircraft will be operated under all the applicable conditions, limitations, and restrictions in the aircraft CDL and associated flight manual.* Updated: Rev # 2 on 03/03/2010 SRRs: 91.213(c); 119.5(f)(1); 121.153(a)(2); 121.303(d)(1); 121.303(d)(2); 121.628(a)(1); 121.628(a)(2); 121.628(a)(3)(i); 121.628(a)(3)(ii); 121.628(a)(4); 121.628(a)(5); 121.628(b)(1); 121.628(b)(2); 121.628(b)(3) Kind Of Question: Flag, Supplemental, Domestic		
1.3	Do procedures specify that each person who takes action in the case of a reported (or observed) failure or malfunction of MEL listed instruments or equipment makes, or will have made, a record of that action in the airplane's maintenance log? Updated: Rev # 2 on 03/03/2010 SRRs: 121.701(a) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain	
1.4	Do procedures require an airworthiness release or log entry after MEL required maintenance is performed? Updated: Rev # 2 on 03/03/2010 SRRs: 121.709(b); 121.709(b)(1); 121.709(b)(3) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain	
1.5	Do procedures require an airworthiness release or log entry after CDL required maintenance is performed? Updated: Rev # 2 on 03/03/2010 SRRs: 121.709(b); 121.709(b)(1); 121.709(b)(3) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain ☐ Not Applicable	
1.6	Do procedures prevent the airworthiness release of aircraft unless applicable MEL items are repaired within the following category repair intervals: • Category A items - within the time specified in the approved MEL, • Category B items - within 3 days, • Category C items - within 10 days, and • Category D items - within 120 days? Updated: Rev # 4 on 09/30/2012 SRRs: D.095; 121.135(a)(1) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain	
1.7	Do MEL management procedures include the five provisions required by operations specifications D095: • A method that provides for tracking the date, and when appropriate, the time an item was deferred and subsequently repaired, • A plan for bringing together parts, maintenance personnel, and aircraft at a specific time and place for repair,	☐ Yes ☐ No, Explain	

	• A review of items deferred, because of the unavailability of parts, to ensure that a valid back order exists with a firm delivery date, • A description of specific duties and responsibilities by the job title of personnel who manage the MEL management process, and • A procedure for controlling extensions to specified maximum repair intervals as permitted by operations specification D095 to include the limit of the extension? **Note(s):** *The procedures must include a supervisory review of the number of deferred items per aircraft and a supervisory review of each deferred item to determine the reason for any delay in repair, length of delay, and estimated date the item will be repaired.* Updated: Rev # 2 on 03/03/2010 SRRs: D.095 Kind Of Question: Flag, Supplemental, Domestic	
1.8	Do procedures for approving extensions to MEL maximum repair intervals specify that: • Extension to the maximum repair intervals for Category A and D items are not authorized, • The FAA must be notified within 24 hours of any approval to extend maximum repair intervals for Category B and C items? Updated: Rev # 2 on 03/03/2010 SRRs: D.095 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
1.9	Do procedures specify that the approved MEL can only be used for aircraft listed in operations specifications D095? Updated: Rev # 2 on 03/03/2010 SRRs: D.095 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
1.10	Do procedures require repetitive inspections that ensure the continued airworthiness of deferred maintenance item (DMI) irregularities? **Note(s):** *DMI's are irregularities such as fuel leak classifications, interim repairs and aircraft dents, that were previously inspected, found to be within serviceable limits and scheduled for repair.* Updated: Rev # 2 on 03/03/2010 SRRs: 121.367(a); 121.367(c); 121.369(b)(1) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain ☐ Not Applicable
1.11	Do procedures address the intent of the guidance contained in FAA Order 8900.1, Volume 4, Chapter 4, Section 1? Updated: Rev # 4 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain

1.12	Do procedures address the intent of the guidance contained in FAA Order 8900.1, Volume 4, Chapter 4, Section 7? Updated: Rev # 4 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
1.13	Do procedures address the intent of the guidance contained in FAA Order 8900.1, Volume 4, Chapter 4, Section 10? Updated: Rev # 4 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain ☐ Not Applicable

1.14	Do Nonessential Equipment and Furnishings (NEF) procedures address the intent of the guidance contained in FAA Order 8900.1, Volume 4, Chapter 4, Section 11?
	
	Updated: Rev # 2 on 03/03/2010
	SRRs: D.095
	Kind Of Question: Flag, Supplemental, Domestic
	
	Related Design JTIs:
	
	1. Verify that the operator's manual system has instructions and information to defer an item under their approved Nonessential Equipment and Furnishings (NEF) program using a evaluation process that meets the intent of the flowchart steps (elements) found in FAA guidance.
	
	    Sources: FAA Order 8900.1, Volume 4, Chapter 4, Section 11
	
	2. Verify that the operators' manual system has instructions and information for releasing aircraft in accordance with the applicable portions of the NEF program will provide applicable maintenance and operations (M & O) procedures necessary for the safe operation of the aircraft.
	
	    Sources: FAA Order 8900.1, Volume 4, Chapter 4, Section 11
	
	3. Verify that the operator's manual system has instructions and information for reporting items placed in the NEF program to the CHDO.
	
	    Sources: FAA Order 8900.1, Volume 4, Chapter 4, Section 11
		☐ Yes
		☐ No, Explain
		☐ Not Applicable

1.15	Does the manual include a requirement to comply with the operations specifications related to this element including clearly identified excerpts, references, mandatory compliance requirements, or other information that will keep employees informed of the impact on their duties and responsibilities? Updated: Rev # 2 on 03/03/2010 SRRs: 119.43(b); 119.43(c); 121.135(a)(4) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
1.16	Does the manual contain policies and procedures that include the duties and responsibilities for personnel involved with this element? **Note(s):** *This includes personnel, in addition to those required by 14 CFR part 119, who*	☐ Yes ☐ No, Explain

	have authority and responsibility for processes covered by this element. Updated: Rev # 2 on 03/03/2010 SRRs: 121.135(b)(2) Kind Of Question: Flag, Supplemental, Domestic	
1.17	Does the manual refer to the appropriate sections of 14 CFR, and are the procedures consistent with the appropriate 14 CFR references or operating certificate concerning this element? **Note(s):** *Procedures for Flag and Supplemental operations must be consistent with applicable foreign regulations as well.* Updated: Rev # 2 on 03/03/2010 SRRs: 121.135(a)(4); 121.135(b)(3) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
1.18	Does the manual contain general policies that require compliance with the SRRs? Updated: Rev # 2 on 03/03/2010 SRRs: 121.135(b)(1) Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
1.19	Are the procedures written in enough detail to ensure the effective coordination of work activities from one person, workgroup, or organization to another to ensure the desired result? Updated: Rev # 5 on 09/30/2013 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain

SAI SECTION 1 - PROCEDURES ATTRIBUTE Drop-Down Menu	
1.	No policy, procedures, instructions, or information specified.
2.	Procedures or instructions and information do not identify who, what, when, where, how.
3.	Policy, procedures, or instructions and information do not comply with CFR.
4.	Policy, procedures, or instructions and information do not comply with FAA policy and guidance.
5.	Policy, procedures, or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen Charts, etc.).
6.	Policy, procedures, or instructions and information unclear or incomplete.
7.	Documentation quality (e.g., unreadable or illegible).
8.	Policy, procedures, or instructions and information inconsistent across certificate holder manuals (FOM - Flight Operations Manual to GMM - General Maintenance Manual, etc.).
9.	Policy, procedures, or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).
10.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
11.	Other.

SAI SECTION 2 - CONTROLS ATTRIBUTE

Objective:

The questions in this section of the SAI will help determine if controls (i.e. checks and restraints) are designed into the processes associated with this element to ensure policies and procedures are followed to achieve desired results.

Tasks
The inspector shall accomplish the following task:
1 Review the policies, procedures, instructions, and information to understand the controls associated with this element.

Questions		
2.1	Are there controls in place to ensure aircraft are not released into service with deferred items that have exceeded their MEL category repair interval time limits? Updated: Rev # 4 on 09/30/2012 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
2.2	Are there controls in place to ensure that the methods for tracking the date, and when appropriate, the time an item was deferred and subsequently repaired are followed? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
2.3	Are there controls in place to ensure the Certificate Management Office is notified within 24 hours of any MEL extensions for Category B and C items? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
2.4	Are there controls in place to ensure that MEL repetitive procedures are accomplished in accordance with the requirements of the MEL and are recorded as being completed in the aircraft logbook? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
2.5	Are there controls in place to ensure the applicable "O" and "M" procedures for MEL items are followed? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
2.6	Are there controls in place to ensure repetitive inspections are performed to determine the continued airworthiness of deferred maintenance item (DMI) irregularities? **Note(s):** *DMI's are irregularities such as fuel leak classifications, interim repairs and aircraft dents, that were previously inspected, found to be within serviceable limits and scheduled for repair.*	☐ Yes ☐ No, Explain ☐ Not Applicable

	Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
2.7	Are there controls in place to ensure procedures for authorizing and controlling extensions to the specified maximum repair intervals for MEL Category B and C items are followed? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
2.8	Are there controls in place to ensure procedures for Configuration Deviation List (CDL) items are properly followed? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain ☐ Not Applicable
2.9	Are there controls in place to ensure equipment added to the Nonessential Equipment and Furnishings (NEF) program will be reported to the CHDO within a specified time? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain ☐ Not Applicable

SAI SECTION 2 - CONTROLS ATTRIBUTE	
Drop-Down Menu	
1.	No controls specified.
2.	Documentation for the controls do not identify who, what, when, where, how.
3.	Controls incomplete.
4.	Controls could be circumvented.
5.	Controls could be unenforceable.
6.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
7.	Other.

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE

Objective:

Process measurements ensure the operator uses an internal evaluation function to detect, identify, and eliminate or control hazards and the associated risk. For airworthiness elements this is a required function of operator's Continuing Analysis and Surveillance System (CASS), required by 14 CFR part 121.373. The director of safety and the quality assurance department often work together to accomplish this function for the operator. Negative findings could require amendments to the safety/internal evaluation program or CASS audit forms or checklists.

Tasks	
	The inspector shall accomplish the following tasks:
1	Review the control questions in Section 2 of this SAI.
2	Review the operator's policies, procedures, instructions, and information to gain an understanding of the process measurements accomplished for this element.

Questions		
3.1	Are there process measurements that evaluate whether the operator's policies, procedures, and controls are achieving the desired results? **Note(s):** *Inspectors should refer to the controls in Section 2 of this SAI for possible process measurements for this element.* *Persons engaged in this process should have a method for identifying undesired results.* Updated: Rev # 2 on 03/03/2010 SRRs: 121.373 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
3.2	Do the operator's process measurements assess the performance of the processes associated with this element? **Note(s):** *Verify audits exist to measure this element's performance.* *Verify audits are scheduled for this element.* *Verify audits ensure everyone, including all outsource providers, comply with the operator's program, manual and all applicable regulations and statutes.* Updated: Rev # 2 on 03/03/2010 SRRs: 121.373 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
3.3	Does the operator's program require the documentation of process measurement results? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
3.4	Does the operator's program describe how the process measurement results are used to improve the ability to achieve the desired results?	☐ Yes ☐ No, Explain

	Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	
3.5	Does the organization that conducts the process measurements have direct access to the person with responsibility for this element? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE
Drop-Down Menu
1. No process measurements specified.
2. Documentation for the process measurements does not identify (who, what, when, where, how).
3. Inability to identify negative findings.
4. No provisions for implementing corrective actions.
5. Ineffective follow-up to determine effectiveness of corrective actions.
6. Resources requirements (personnel, facilities, equipment, technical data).
7. Other.

SAI SECTION 4 - INTERFACES ATTRIBUTE

Objective:

Data collected in this section helps the principal inspector determine if the operator identifies, documents and manages change between this process and other related processes within the operator's organization. It is important for the operator to identify and document where interactions between processes exist, and to have a method of managing change between these processes. Written policies, procedures, or instructions and information that are interrelated and located in different manuals within the operator's manual system must be consistent to allow personnel to perform their duties and responsibilities with a high degree of safety.

Tasks	
	The inspector shall accomplish the following task:
1	Review interfaces associated with the processes for this element.

Questions		
4.1	Does the operator identify and document the interfaces between processes? Updated: Rev # 5 on 09/30/2013 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
4.2	Does the operator have a method to evaluate the impact of changes in this process to other related processes that interface with this process? Updated: Rev # 5 on 09/30/2013 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain

SAI SECTION 4 - INTERFACES ATTRIBUTE
Drop-Down Menu

1.	No interfaces specified.
2.	The following interfaces not identified within the certificate holder's manual system:
3.	Interfaces listed are inaccurate.
4.	Specific location of interfaces not identified within the manual system.
5.	Other

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE

Objective:

Data from questions in this section will help the determine if there is an identifiable, qualified (when required by CFR), and knowledgeable person who:

- Is responsible for the process,
- Is answerable for the quality of the process, and
- Has the authority to establish and modify the process.

Tasks	
	The inspector shall accomplish the following tasks:
1	Identify the person(s) who has overall responsibility for this element.
2	Identify the person(s) who has the authority to revise the procedures associated with this element.
3	Review the duties and responsibilities of the above person(s).
4	Review the appropriate organizational chart.

Questions		
5.1	Is an individual(s) identified who is responsible for the quality of the procedures associated with this element? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
5.2	Is an individual(s) identified who has the authority to establish and modify the policies, procedures, instructions, and information associated with this element? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
5.3	Are duties and responsibilities documented for those who manage the procedures associated with this element? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain
5.4	Does the operator document the procedures for delegation of authority for this element? Updated: Rev # 2 on 03/03/2010 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE Drop-Down Menu

1.	Not documented.
2.	Documentation unclear.

3.	Documentation incomplete.
4.	Other.